

From: [R4LIMS](#)
To: [Amoroso, Cathy](#)
Cc: [Turner, Nardina](#); Sandra.Harrigan@ttemi.com; jessica.vickers@ttemi.com; [Saskowski, Ronald](#); [Trapp, Kristin](#); [Hendel, Jeffrey](#); [Aker, Sandra](#)
Subject: R4 LIMS Results: Project 20-0055, E194902 VOA 01 02 20 1059
Date: Thursday, January 2, 2020 10:45:26 PM
Attachments: [E194902 VOA FINAL 01 02 20 1059.PDF](#)
[E194902 VOA FINAL 01 02 20 1059 - 20-0055 - PATTERSON STREET SOLVENT PLUME 01-02-2020.NCN000404887.Dat](#)

On Thursday, January 2, 2020, results for the following were released by the Region 4 Laboratory:

Analyses:

Volatile Organics (VOA)

Project Number: 20-0055

Project Name: Patterson Street Solvent Plume

City: Greensboro **County:** Guilford **State:** NC

These results were reported by:

Kristin Trapp (E-mail: Trapp.Kristin@epa.gov)

If you have questions concerning the laboratory results, please feel free to contact the laboratory personnel shown above as having reported the data. We also encourage you to provide feedback to the Region 4 laboratory by filling out our online (*EPA internal network only*) [Customer Survey Form](#).

These results are for the following Sample Type(s):

Water (Surface Water)

Water (Trip Blank - Water)

PDF DATA RESULTS REPORT FILE ATTACHMENT:

An Adobe Acrobat PDF file is attached to this message that contains final results for the analyses as indicated in the data report.

DATA EXPORT FILE ATTACHMENT:

If attached, data export files will be tab delimited ASCII text files contained in a file that has been formatted using the ZIP archiving format (.Dat extension). Please consult your local computer support personnel if you have problems extracting these files. If you have questions about the data file formats and the information contained in these files, or if you would like to request export files for previously reported data, use the contact information shown below to contact the appropriate person with your concerns. To generate export files for previously reported data we'll need the name of the PDF report file that was attached to the original transmittal message.

For questions concerning this message and attachments, or any other LIMS or data reporting issues, please call the LSASD PC Hotline at 706-355-8825 or send an email to r4lims@epa.gov.

SAMPLE DISPOSAL POLICY:

Due to limited space for long term sample storage, LSB's policy is to dispose of samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at R4SampleCustody@epa.gov.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 4 Laboratory Services and Applied Science Division
980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 20-0055

Project: 20-0055, Patterson Street Solvent Plume - Reported by Kristin Trapp

January 2, 2020

4LSASD-LSB

MEMORANDUM

SUBJECT: FINAL Analytical Report
Project: 20-0055, Patterson Street Solvent Plume

FROM: Kristin Trapp
OCS Analyst

THRU: Jeffrey Hendel, Chief
LSB Organic Chemistry Section

TO: Cathy Amoroso

Attached are the final results for the analytical groups listed below. This report shall not be reproduced except in full without approval of the Region 4 laboratory. These analyses were performed in accordance with the Laboratory Services Branch's Laboratory Operations and Quality Assurance Manual (LSB LOQAM) found at www.epa.gov/region4/sesd/asbsop. Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the LSB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Chapter 5 of the LSB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Accreditations:

Volatile Organics (VOA)

Volatile organic compounds

EPA 8260C (Water)

ISO



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cc: Nardina Turner



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SAMPLES INCLUDED IN THIS REPORT

Project: 20-0055, Patterson Street Solvent Plume

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
PSP-TB-04	E194902-01	Trip Blank - Water	12/3/19 10:00	12/5/19 11:10
PSP31-SW	E194902-16	Surface Water	12/3/19 09:20	12/5/19 11:10
PSP32-SW	E194902-17	Surface Water	12/3/19 09:07	12/5/19 11:10



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DATA QUALIFIER DEFINITIONS

U The analyte was not detected at or above the reporting limit.

ACRONYMS AND ABBREVIATIONS

CAS Chemical Abstracts Service

Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System (www.epa.gov/srs), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.

MDL Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.

MRL Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.

TIC Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

ACCREDITATIONS:

ISO ASB is accredited by ISO/IEC 17025, including an amplification for forensic accreditation through ANSI-ASQ National Accreditation Board.

Refer to the certificate and scope of accreditation AT-1644 at:
<http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd>

NR The EPA Region 4 Laboratory has not requested accreditation for this test.



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D.A.R.T. Id: 20-0055

Project: 20-0055, Patterson Street Solvent Plume - Reported by Kristin Trapp

Volatile Organics

Project: 20-0055, Patterson Street Solvent Plume

Sample ID: PSP-TB-04

Lab ID: E194902-01

Station ID:

Matrix: Trip Blank - Water

Date Collected: 12/3/19 10:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 13:05	EPA 8260C
156-59-2	cis-1,2-Dichloroethene	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 13:05	EPA 8260C
127-18-4	Tetrachloroethene (Tetrachloroethylene)	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 13:05	EPA 8260C
156-60-5	trans-1,2-Dichloroethene	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 13:05	EPA 8260C
79-01-6	Trichloroethene (Trichloroethylene)	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 13:05	EPA 8260C
75-01-4	Vinyl chloride	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 13:05	EPA 8260C



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Project: 20-0055, Patterson Street Solvent Plume - Reported by Kristin Trapp

Volatile Organics

Project: 20-0055, Patterson Street Solvent Plume

Sample ID: PSP31-SW

Lab ID: E194902-16

Station ID: PSP31

Matrix: Surface Water

Date Collected: 12/3/19 9:20

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 14:25	EPA 8260C
156-59-2	cis-1,2-Dichloroethene	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 14:25	EPA 8260C
127-18-4	Tetrachloroethene (Tetrachloroethylene)	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 14:25	EPA 8260C
156-60-5	trans-1,2-Dichloroethene	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 14:25	EPA 8260C
79-01-6	Trichloroethene (Trichloroethylene)	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 14:25	EPA 8260C
75-01-4	Vinyl chloride	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 14:25	EPA 8260C



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Volatile Organics

Project: 20-0055, Patterson Street Solvent Plume

Sample ID: PSP32-SW

Lab ID: E194902-17

Station ID: PSP32

Matrix: Surface Water

Date Collected: 12/3/19 9:07

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 16:11	EPA 8260C
156-59-2	cis-1,2-Dichloroethene	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 16:11	EPA 8260C
127-18-4	Tetrachloroethene (Tetrachloroethylene)	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 16:11	EPA 8260C
156-60-5	trans-1,2-Dichloroethene	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 16:11	EPA 8260C
79-01-6	Trichloroethene (Trichloroethylene)	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 16:11	EPA 8260C
75-01-4	Vinyl chloride	0.50	U	ug/L	0.50	12/09/19 9:42	12/09/19 16:11	EPA 8260C



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Volatile Organics (VOA) - Quality Control

US-EPA, Region 4, LSASD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1912017 - V 5030B VOA Wtr Prep

Blank (1912017-BLK1)

Prepared & Analyzed: 12/09/19

EPA 8260C

1,1-Dichloroethene (1,1-Dichloroethylene)	U	0.50	ug/L							U
cis-1,2-Dichloroethene	U	0.50	"							U
Tetrachloroethene (Tetrachloroethylene)	U	0.50	"							U
trans-1,2-Dichloroethene	U	0.50	"							U
Trichloroethene (Trichloroethylene)	U	0.50	"							U
Vinyl chloride	U	0.50	"							U

LCS (1912017-BS1)

Prepared & Analyzed: 12/09/19

EPA 8260C

1,1-Dichloroethene (1,1-Dichloroethylene)	20.740	ug/L	20.000	104	85.4-116
cis-1,2-Dichloroethene	21.650	"	20.000	108	87.6-115
Tetrachloroethene (Tetrachloroethylene)	21.100	"	20.000	106	85.1-113
trans-1,2-Dichloroethene	21.790	"	20.000	109	86.6-114
Trichloroethene (Trichloroethylene)	21.320	"	20.000	107	87.8-114
Vinyl chloride	21.830	"	20.000	109	78.8-115

Matrix Spike (1912017-MS1)

Source: E194902-16

Prepared & Analyzed: 12/09/19

EPA 8260C

1,1-Dichloroethene (1,1-Dichloroethylene)	12.450	ug/L	10.233	0.0000	122	87.5-133
cis-1,2-Dichloroethene	12.310	"	10.233	0.0000	120	85.3-127
Tetrachloroethene (Tetrachloroethylene)	11.560	"	10.233	0.0000	113	66.4-149
trans-1,2-Dichloroethene	12.250	"	10.233	0.0000	120	86.8-128
Trichloroethene (Trichloroethylene)	11.670	"	10.233	0.0000	114	87.2-128
Vinyl chloride	13.770	"	10.233	0.0000	135	84.5-135

Matrix Spike Dup (1912017-MSD1)

Source: E194902-16

Prepared & Analyzed: 12/09/19

EPA 8260C

1,1-Dichloroethene (1,1-Dichloroethylene)	12.480	ug/L	10.233	0.0000	122	87.5-133	0.241	12.8	
cis-1,2-Dichloroethene	11.730	"	10.233	0.0000	115	85.3-127	4.83	10.8	
Tetrachloroethene (Tetrachloroethylene)	11.640	"	10.233	0.0000	114	66.4-149	0.690	13.4	
trans-1,2-Dichloroethene	12.340	"	10.233	0.0000	121	86.8-128	0.732	11	
Trichloroethene (Trichloroethylene)	11.660	"	10.233	0.0000	114	87.2-128	0.0857	15	
Vinyl chloride	14.050	"	10.233	0.0000	137	84.5-135	2.01	14.1	QM-2



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Volatile Organics (VOA) - Quality Control

US-EPA, Region 4, LSASD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1912017 - V 5030B VOA Wtr Prep

MRL Verification (1912017-PS1)

Prepared & Analyzed: 12/09/19

EPA 8260C

1,1-Dichloroethene (1,1-Dichloroethylene)	2.2900		ug/L	2.0000		114	65.4-136			
cis-1,2-Dichloroethene	2.1900		"	2.0000		110	67.6-135			
Tetrachloroethene (Tetrachloroethylene)	2.3500		"	2.0000		118	65.1-133			
trans-1,2-Dichloroethene	2.2800		"	2.0000		114	66.6-134			
Trichloroethene (Trichloroethylene)	2.0500		"	2.0000		102	67.8-134			
Vinyl chloride	2.6600		"	2.0000		133	58.8-135			



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Notes and Definitions for QC Samples

- U The analyte was not detected at or above the reporting limit.
- QM-2 Matrix Spike Recovery greater than method control limits